# Section 2. DATA RECORDING

## 4-2-1. TYPES OF DATA RECORDED

    **a.** M1FC entry for:

        1. Flight plans and related messages.

        2. Logging pilot briefings and aircraft contacts.

        3. Service A/B messages.

    **b.** AIS/manual functions strip marking.

## 4-2-2. METHODS OF RECORDING DATA

    **a.** In M1FC facilities entries are made directly into the computer.

*NOTE-*
*Inflight positions may use locally approved written procedures to record data during heavy traffic periods, however, aircraft contact information should be logged in the computer system as soon as practical.*

    **b.** AIS facilities use FAA Form 7230-21 or FAA Form 7233-5 to record flight progress data or inflight pilot briefs. Flight notification messages may be used as substitutes for strips.

    **c.** Use control/clearance symbols, abbreviations, location identifiers, and contractions for recording position reports, traffic clearances, and other data, where appropriate, in M1FC entries and on flight progress strips. When recording data, you may use:

        1. Plain language markings to supplement data when it will aid in understanding the recorded information.

        2. Locally approved contractions and identifiers for frequently used terms and local fixes not listed in either FAAO 7340.1, Contractions or FAAO 7350.6, Location Identifiers. Use only within your facility, not on data or interphone circuits. All locally approved contractions and identifiers shall be placed in facility files for record and reference purposes.

        3. Plain sheets of paper to record information when the use of flight progress strips is not feasible.

        4. Blank paper to record lengthy ATC clearances or in the case of numerous contacts with the same aircraft; e.g., orientation or emergencies.

    **d.** To prevent misinterpretation of data hand printed on flight progress strips, use the standard hand-printed characters shown in FIG 4-2-1.

**Hand-Printed Characters Chart**



| Typed | Hand Printed |
|-------|--------------|
| A | A |
| B | B |
| C | C |
| D | D |
| E | E |
| F | F |
| G | G |
| H | H |
| I | I |
| J | J |
| K | K |
| L | L |
| M | M |
| N | N |
| O | O |
| P | P |
| Q | Q |
| R | R |
| S | S |
| T | T |
| U | U |
| V | V |
| W | W |
| X | X |
| Y | Y |
| Z | Z |
| 1 | 1 |
| 2 | 2 |
| 3 | 3 |
| 4 | 4 |
| 5 | 5 |
| 6 | 6 |
| 7 | 7 |
| 8 | 8 |
| 9 | 9 |
| 0 | Ø |

*FIG 4-2-1*

*NOTE-*
*A slant line crossing through the numeral zero and an underline of the letter "S" on handwritten portions of flight*

*progress strips are required only when there is reason to believe the lack of these markings could lead to a misunderstanding. A slant line through the numeral zero is required on all weather data.*

**e.** To correct or update data, draw a horizontal line through it and write the correct information adjacent to it.

**f.** Do not erase any item.

### 4-2-3. IFR/VFR/DVFR FLIGHT PLAN RECORDING

**a.** Use FAA Form 7233-1 to record flight plans in an AIS facility, and forward information on flight plan modifications, cancellations, activations, and closures to the appropriate position for handling.

**b.** M1FC VFR/DVFR Flight Plan. The following commands are normally used in the performance of VFR/DVFR flight plan functions.

**1.** Flight Plan Filing. (See TBL 4-2-1.)

**Flight Plan Filing**

| Command | Result |
|---|---|
| FP | Displays blank domestic flight plan mask. |
| (Fill in mask) | Enter flight plan elements as required. |
| GI | Transmits flight plan. |

*TBL 4-2-1*

**2.** Flight Plan Modification. (See TBL 4-2-2.)

**Flight Plan Modification**

| Command | Result |
|---|---|
| FP ACID | Displays flight plan by ACID. |
| (Modify data) | Flight plan elements as required using TAB key. |
| STPM | Existing flight plan replaced by modified flight plan on proposed list. |
| STIM | Existing flight plan replaced by modified flight plan on inbound list. |

*TBL 4-2-2*

**3.** Cancel Flight Plan. (See TBL 4-2-3.)

**Cancel Flight Plan**

| Command | Result |
|---|---|
| FP ACID | Displays flight plan by ACID. |
| CX | Flight plan cancelled. |
| CX (remarks) | Flight plan cancelled with remarks. |

*TBL 4-2-3*

*NOTE-*
*A cancelled flight plan is one that has not been activated.*

**4.** Flight Plan Activation. (See TBL 4-2-4.)

**Flight Plan Activation**

| Command | Result |
|---|---|
| FP ACID | Displays flight plan by ACID. |
| (Change P Time to D Time) | Prepares Flight plan for transmission. |
| GI | Flight notification is transmitted. |

*TBL 4-2-4*

**5.** Flight Plan Closure. When closing a VFR flight plan, obtain departure point and destination, if not already known. (See TBL 4-2-5.)

**Flight Plan Closure**

| Command | Result |
|---|---|
| CL ACID | Flight plan closed. |
| CL ACID, (remarks) | Flight plan closed with remarks. |

*TBL 4-2-5*

**c.** M1FC IFR Flight Plans. The following commands are normally used in the performance of IFR flight plan functions.

**1.** Flight Plan Filing. (See TBL 4-2-6.)

**Flight Plan Filing**

| Command | Result |
|---|---|
| FP | Displays blank domestic flight plan mask. |
| (Fill in mask) | Enter flight plan elements as required. |
| GI | Transmits flight plan with route validation. |
| GI RO | Transmits flight plan by-passing route validation. |

*TBL 4-2-6*

**2.** Flight Plan Modification. (See TBL 4-2-7.)

**Flight Plan Modification**

| Command | Result |
|---|---|
| FP ACID | Displays flight plan by ACID. |
| (Modify data) | Modify flight plan elements as required using TAB key. |
| STPM | Existing flight plan replaced by modified flight plan on proposed list. |

*TBL 4-2-7*

3. Cancel Flight Plan. (See TBL 4-2-8.)

**Cancel Flight Plan**

| Command | Result |
|---|---|
| FP ACID | Displays flight plan by ACID. |
| CX | Flight plan cancelled. |
| CX (remarks) | Flight plan cancelled with remarks. |

*TBL 4-2-8*

## 4-2-4. PILOT WEATHER REPORTS

a. PIREP's are formatted for input into M1FC by the use of "Display PIREP entry format (WY)" keyword. The following commands are required to transmit PIREP's via the PIREP mask. (See TBL 4-2-9.)

**PIREP Entry**

| Command | Result |
|---|---|
| WY | Displays the PIREP entry format mask. |
| Formulate PIREP using either the free form area of the mask, or the mask, but not both. | |
| GI(s) | (1) Transmits to the AWP's.<br><br>(2) Generates P alert flag at all terminals enabled for P alerts within FSDPS family. |

*TBL 4-2-9*

b. In an AIS facility, use FAA Form 7110-2 or material deemed appropriate.

## 4-2-5. LOGGING AIRCRAFT CONTACTS AND INFLIGHT BRIEFINGS INTO M1FC

a. Aircraft contacts and inflight briefings are logged and stored on the DD file for accountability.

b. Required elements:

1. Inflight Briefing (IB).

2. Type of Flight (TOF).

3. Type of Service (TOS).

4. ACID.

5. Remarks.

*EXAMPLE-*
*IB (TOF),(TOS),(ACID), REMARKS.*

*NOTE-*
*If current partial exists, ACID is optional.*
(See TBL 4-2-10.)

**Type of Flight**

| TOF | (TYPE OF FLIGHT) |
|---|---|
| IC | IFR AIR CARRIER |
| IG | IFR GENERAL |
| IM | IFR MILITARY |
| IT | IFR AIR TAXI |
| VC | VFR AIR CARRIER |
| VG | VFR GENERAL |
| VM | VFR MILITARY |
| VT | VFR AIR TAXI |
| Example: "IGI" = IFR General ICAO. | |
| For DVFR, replace "V" with "D." | |
| For ICAO, add "I" to TOF. | |
| TOS (TYPE OF SERVICE) | |
| A | ACFT contact & airport advisory |
| AB | ACFT contact, airport advisory & briefing |
| B | ACFT contact & briefing |
| BLANK | ACFT contact |

*TBL 4-2-10*

(See TBL 4-2-11.)

**Contacts & Inflight Briefings**

| CB | This is used to log general information in the DD file without adding to the traffic count. Current partial is by-passed. |
|---|---|
| IB DG,,N1234, "Remarks" | ACFT contact, DVFR General, ACID in current partial by-passed. |
| IB IG,,,ALSTG | ACFT contact, IFR General, Remarks. |
| IB IGI,B,N1,VNR | ACFT contact, IFR General ICAO, Briefing, ACID in current partial by-passed, Remarks. |
| IB VM,B,, "Remarks" | ACFT contact, VFR Military, Briefing. |
| IB VG,A,,"Remarks" | ACFT contact, VFR General, Airport Advisory. |
| IB ,,N1,Remarks | This is used to log additional radio contacts. |

*TBL 4-2-11*

c. In the REMARKS block, locally approved contractions and identifiers may be used for frequently used terms not listed in either FAAO 7340.1, Contractions or FAAO 7350.7, Location Identifiers.

d. If the inflight position is recorded, you may limit entries in the REMARKS to those necessary for your use.

### 4-2-6. FLIGHT PROGRESS STRIPS (FAA FORMS 7230-21 AND 7233-5)

a. When officially used to record inflight data, use flight progress strips to record:

1. Aircraft contacts.

2. ATC clearances.

3. Pilot briefings on airborne aircraft.

4. Other operationally significant items.

b. Use one flight progress strip for each flight, and record all contacts with that flight on the same strip. If supplemental strips are needed for additional writing space, keep the original and supplemental strips together and consider them as one strip.

### 4-2-7. FLIGHT PROGRESS STRIPS AND ENTRY DATA

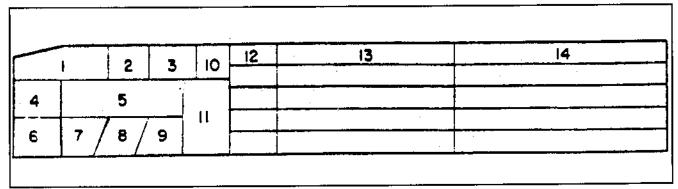a. Flight progress strip. (See FIG 4-2-2.)

**FLIGHT PROGRESS STRIP**



FIG 4-2-2

b. Flight progress strip entry. (See FIG 4-2-3.)

**STRIP ENTRY 1**



FIG 4-2-3

**STRIP ENTRY 2**



FIG 4-2-4

## FLIGHT PROGRESS STRIP

```
+--------------------------------------------------------------+
|                                            13         14     |
|  ADDRESS                                                     |
|  TEXT OF FLIGHT NOTIFICATION MESSAGE                         |
|              10           11          12                     |
|                                                              |
+--------------------------------------------------------------+
```

*FIG 4-2-5*

Flight progress strip Item and Information.
(See TBL 4-2-12.)

### Item and Information

| Item | Information |
|------|-------------|
| 1 | ACID (To identify IFR aircraft piloted by solo USAF under–graduate pilot, the letter Z will be added to aircraft ID on the flight progress strip. Do not use the suffix in ground-to-air communications.) |
| 2 | Type of aircraft/special equipment. |
| 3 | TAS and altitude (IFR). Altitude (VFR/DVFR, if known). |
| 4 | Departure point. |
| 5 | Route of flight. |
| 6 | Destination. |
| 7 | Actual departure time, or Time VFR flight plan activated. |
| 8 | ETA at destination. |
| 9 | Estimated time of fuel exhaustion. |
| 10 | Type of flight. |
| 11 | Action time; e.g., overdue time, fuel exhaustion time, LR contact time. |
| 12 | Time of contact with pilot. |
| 13 | Information received from pilot/another facility. |
| 14 | Data issued to the aircraft. |

*TBL 4-2-12*

Flight progress strip abbreviation. (See TBL 4-2-13)

### Abbreviation

| Abbreviation | Meaning |
|--------------|---------|
| → | Over Flight. |
| ↓ | Inbound Flight. |
| ↗ | Outbound Flight. |
| I | IFR. |
| IR | Island Reporting. |
| D | DVFR. |
| LR | Lake Reporting. |
| S | SVFR. |
| V | VFR. |

### Abbreviation *Continued*

| Abbreviation | Meaning |
|--------------|---------|
| MR | Mountain Reporting. |
| SR | Swamp Reporting. |

*TBL 4-2-13*

Flight progress strip abbreviation. (See TBL 4-2-14.)

### Abbreviation

| Abbreviation | Meaning |
|--------------|---------|
| A | AIRMET (WA). |
| AA | Airport Advisory. |
| CWT | Caution Wake Turbulence. |
| DA | Decided Against Flight. |
| DD | Decided to Delay Flight. |
| DW | Downwind. |
| FP | Filed Flight Plan. |
| IC | Incomplete Briefing. |
| PB | Pilot Brief. |
| RY | Runway. |
| S | SIGMET (WS) and/or Convective SIGMET (WST). |
| VNR | VFR Flight not recommended (Pilot Brief). |

*TBL 4-2-14*

c. Record ATC instructions and clearances completely and exactly.

d. Summarize other data using approved symbols and contractions.

e. Do not record issuance of altimeter setting unless that is the only information provided during the contact.

f. When flight notification messages are used to record flight progress data, cut or tear the paper to fit the strip holder. Enter items 10 through 14 in the corresponding numbered location illustrated in FIG 4-2-4.

### 4-2-8. AIRCRAFT CONTACTS

a. Use a flight progress strip, the aircraft proposal, or flight notification message to record information on aircraft contacts. At M1FC facilities, inflight contacts

may be logged in either M1FC equipment, on flight progress strips, or on facility approved alternate forms.

**b.** If the station has the aircraft's flight plan, enter FP in space 14 to show FAA Form 7233-1 is filed in the facility.

**c.** If there is no flight plan on file for the aircraft contacting the station, obtain and post the following:

    **1.** ACID.

    **2.** Type of flight.

    **3.** Time of contact.

    **4.** Aircraft contact record.

    **5.** Other items which are operationally significant.

**d.** If the inflight position is recorded, you may limit entries in the aircraft contact portion of the strip to those necessary for your use.

## 4-2-9. CONTROL SYMBOLOGY

**a.** Use authorized control and clearance symbols or abbreviations for recording clearances, reports, and instructions.

**b.** The following tables contain abbreviation and control information symbols. (See TBL 4-2-15 and TBL 4-2-16.)

**Clearance Abbreviation**

| Abbreviation | Meaning |
|---|---|
| A | Cleared to airport (point of intended landing). |
| B | Center clearance delivered. |
| C | ATC clears (when clearance relayed through non-ATC facility). |
| CAF | Cleared as filed. |
| D | Cleared to depart from the fix. |
| F | Cleared to the fix. |
| H | Cleared to hold and instructions issued. |
| L | Cleared to land. |
| N | Clearance not delivered. |

**Clearance Abbreviation** *Continued*

| Abbreviation | Meaning |
|---|---|
| O | Cleared to the outer marker. |
| PD | Cleared to climb/descend at pilot's discretion. |
| Q | Cleared to fly specified sectors of a NAVAID defined in terms of courses, bearings, radials, or quadrants within a designated radius. |
| T | Cleared through (for landing and takeoff through intermediate point). |
| V | Cleared over the fix. |
| X | Cleared to cross (airway, route, radial) at (point). |
| Z | Tower jurisdiction. |

*TBL 4-2-15*

**Miscellaneous Abbreviation**

| Abbreviation | Meaning |
|---|---|
| BC | Back course approach. |
| CT | Contact approach. |
| FA | Final approach. |
| GPS | GPS approach. |
| I | Initial approach. |
| ILS | ILS approach. |
| MA | Missed approach. |
| MLS | MLS approach. |
| NDB | Nondirectional radio beacon approach. |
| OTP | VFR conditions-on-top. |
| PA | Precision approach. |
| PT | Procedure turn. |
| RH | Runway heading. |
| RP | Report immediately upon passing (fix/altitude). |
| RX | Report crossing. |
| SA | Surveillance approach. |
| SI | Straight-in approach. |
| TA | TACAN approach. |
| TL | Turn left. |
| TR | Turn right. |
| VA | Visual approach. |
| VR | VOR approach. |

*TBL 4-2-16*

## CONTROL INFORMATION SYMBOLS CHART 1

| Symbols | Meaning |
|---|---|
| T → ( ) | Depart (direction, if specified) |
| ↑ | Climb and maintain |
| ↓ | Descend and maintain |
| → | Cruise |
| @ | At |
| X | Cross |
| -M→ | Maintain |
| ⁊ | Join or intercept airway/jet route/track or course |
| ▪ | While in controlled airspace |
| △ | While in control area |
| ⊿ | Enter control area |
| ⊿ | Out of control area |
| NW ↻ <br> ⟋NE <br> ↪ E | Cleared to enter, depart or through surface area Indicated direction of flight by arrow and appropriate compass letter. Maintain Special VFR conditions (altitude if appropriate) while in surface area |
| 250 K | Aircraft requested to adjust speed to 250 knots. |
| -20 K | Aircraft requested to reduce speed 20 knots. |
| +30 K | Aircraft requested to increase speed 30 knots. |
| (W) | Local Special VFR operations in the vicinity of (name) airport are authorized until(time). Maintain special VFR conditions (altitude if appropriate). |
| > | Before |
| < | After or Past |
| 170 (red) | Inappropriate altitude/flight level for direction of flight. (Underline assigned altitude/flight level in red.) |
| / | Until |
| ( ) | Alternate Instructions |
| Restriction | Restriction |
| ⟘ | At or Below |
| ⟙ | At or Above |
| -(Dash) | From-to (route, time, etc.) |
| (Alt)B(Alt) | Indicates a block altitude assignment. Altitudes are inclusive, and the first altitude shall be lower than the second. Example: 310B370 |
| v < | Clearance void if aircraft not off ground by (time) |

NOTE: The absence of an airway route number between two fixes in the route of flight indicates "direct"; no symbol or abbreviation is required.

*FIG 4-2-6*

## CONTROL INFORMATION SYMBOLS CHART 2

| Symbols | Meaning |
|---|---|
| ₵ | Pilot cancelled flight plan |
| √ | EN ROUTE: Aircraft has reported at assigned altitude, Example: 80 |
| √ | TERMINAL/FSS: Information forwarded (indicated information forwarded as required) |
| ◯ (red) | EN ROUTE: Information or revised information forwarded. (Circle, in red, inappropriate altitude/flight level for direction of flight or other control information when coordinated. Also circle, in red, the time (minutes and altitude when a flight plan or estimate is forwarded. Use this method in both inter-center and intra-center coordination.) |
| (50) | Other than assigned altitude reported (circle reported altitude) |
| H 10 6 | DME holding (use with mileages) (Upper figure indicates distance from station to DME fix, lower figure indicates length of holding pattern. In this example. the DME fix is 10 miles out with a 6 mile pattern indicated. |
| (ml.)(dir.) | DME arc of VORTAC, TACAN, or MLS. |
| C—(freq.) | Contact (facility) or (freq.), (time, fix, or altitude if appropriate). Insert frequency only when it is other than standard. |
| R | Radar contact. |
| R | EN ROUTE: Requested altitude (preceding altitude information) |
| R̸ | Radar service terminated |
| ✗R✗ | Radar contact lost |
| RV | Radar vector |
| RV̸ | Pilot resumed own navigation |
| ®| Radar handoff (circle symbol when handoff completed) |
| E (red) | EMERGENCY |
| W (red) | WARNING |
| P | Point out initiated. Indicate the appropriate facility, sector or position. Example: PZFW. |
| FUEL | Minimum fuel |

NOTE: The absence of an airway route number between two fixes in the route of flight indicates "direct"; no symbol or abbreviation is required.

*FIG 4-2-7*